

This listing of claims will replace all prior versions and listings of claims in this application. As set forth below in this listing, claims 31-50 are cancelled follows:

1. (Original) A see-through medaka wherein said medaka is deficient in iridophores, melanophores, xanthophores and leucophores.
2. (Previously presented) The see-through medaka according to claim 1 wherein said medaka is produced by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3 and leucophore deficient mutant medaka strain 1f.
3. (Previously presented) A see-through medaka wherein said medaka is produced by further selective mating between the see-through medaka according to claim 2 and iridophore deficient mutant medaka strain il-1.
4. (Original) A see-through medaka wherein said medaka is deficient in iridophores, melanophores and xanthophores, and wherein the sex of said medaka can be identified by the presence or absence of leucophores and/or a DNA marker.
5. (Previously presented) The see-through medaka according to claim 4 wherein said medaka is produced by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f and medaka FLF strain which is deficient in leucophores in the female.
6. (Previously presented) A see-through medaka wherein said medaka is produced by further selective mating between the see-through medaka according to claim 3 and a see-through medaka produced by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f, and medaka FLF strain which is deficient in leucophores in the female.

7. (Previously presented) A transgenic see-through medaka deficient in iridophores, melanophores, xanthophores and leucophores, having in its genome a transgene being a fusion of a promoter of a gene which expresses specifically in a specific organ, with a coding region of a gene encoding a fluorescent protein, wherein said fluorescent protein is expressed specifically in said organ.

8. (Previously presented) A transgenic see-through medaka produced by further selective mating between the see-through medaka according to claim 2 and an iridophore deficient mutant medaka strain il-1,

wherein a transgene being a fusion of a promoter of a gene which expresses specifically in a specific organ, with a coding region of a gene encoding a fluorescent protein, is introduced into the produced see-through medaka, and/or is carried by at least one of the see-through medaka according to claim 2 and the iridophore deficient mutant medaka strain il-1,

so that the transgenic see-through medaka has in its genome said transgene, and wherein said fluorescent protein is expressed specifically in said organ.

9. (Previously presented) A transgenic see-through medaka deficient in iridophores, melanophores and xanthophores, wherein the sex of said medaka can be identified by the presence or absence of leucophores and/or a DNA marker, having in its genome a transgene being a fusion of a promoter of a gene which expresses specifically in a specific organ, with a coding region of a gene encoding a fluorescent protein, wherein said fluorescent protein is expressed specifically in said organ.

10. (Previously presented) A transgenic see-through medaka produced by further selective mating between the see-through medaka according to claim 3 and a see-through medaka produced by repeated selective mating between iridophore deficient mutant medaka strain gu,

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f, and medaka FLF strain which is deficient in leucophores in the female,

wherein a transgene being a fusion of a promoter of a gene which expresses specifically in a specific organ, with a coding region of a gene encoding a fluorescent protein, is introduced into the produced see-through medaka, and/or is carried by at least one of the see-through medaka according to claim 3 and a see-through medaka produced by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f, and medaka FLF strain which is deficient in leucophores in the female,

so that the transgenic see-through medaka has in its genome said transgene, and wherein said fluorescent protein is expressed specifically in said organ.

11. (Previously presented) The transgenic see-through medaka according to claim 7 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

12. (Previously presented) The transgenic see-through medaka according to claim 8 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

13. (Previously presented) The transgenic see-through medaka according to claim 9 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

14. (Previously presented) The transgenic see-through medaka according to claim 10 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

15. (Previously presented) The transgenic see-through medaka according to claim 7 wherein said organ is a gonadal organ.

16. (Previously presented) The transgenic see-through medaka according to claim 8 wherein said organ is a gonadal organ.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

17. (Previously presented) The transgenic see-through medaka according to claim 9 wherein said organ is a gonadal organ.

18. (Previously presented) The transgenic see-through medaka according to claim 10 wherein said organ is a gonadal organ.

19. (Previously presented) The transgenic see-through medaka according to claim 11 wherein said organ is a gonadal organ.

20. (Previously presented) The transgenic see-through medaka according to claim 12 wherein said organ is a gonadal organ.

21. (Previously presented) The transgenic see-through medaka according to claim 13 wherein said organ is a gonadal organ.

22. (Previously presented) The transgenic see-through medaka according to claim 14 wherein said organ is a gonadal organ.

23. (Previously presented) A transgenic see-through medaka produced by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3 and leucophore deficient mutant medaka strain 1f,

wherein a transgene being a fusion of a promoter of a gene which expresses specifically in a specific organ, with a coding region of a gene encoding a fluorescent protein, is introduced into the produced see-through medaka, and/or is carried by at least one of the iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3 and leucophore deficient mutant medaka strain 1f,

so that the transgenic see-through medaka has in its genome said transgene, and wherein said fluorescent protein is expressed specifically in said organ.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER <sup>LLP</sup>

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

24. (Previously presented) A transgenic see-through medaka produced by repeated selective mating between iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f and medaka FLF strain which is deficient in leucophores in the female,

wherein a transgene being a fusion of a promoter of a gene which expresses specifically in a specific organ, with a coding region of a gene encoding a fluorescent protein, is introduced into the produced see-through medaka, and/or is carried by at least one of the iridophore deficient mutant medaka strain gu, albino mutant medaka strain i-3, leucophore deficient mutant medaka strain 1f and medaka FLF strain which is deficient in leucophores in the female,

so that the transgenic see-through medaka has in its genome said transgene, and wherein said fluorescent protein is expressed specifically in said organ.

25. (Previously presented) The transgenic see-through medaka according to claim 23 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

26. (Previously presented) The transgenic see-through medaka according to claim 24 wherein said gene encoding the fluorescent protein is a gene encoding a green fluorescent protein.

27. (Previously presented) The transgenic see-through medaka according to claim 23 wherein said organ is a gonadal organ.

28. (Previously presented) The transgenic see-through medaka according to claim 24 wherein said organ is a gonadal organ.

29. (Previously presented) The transgenic see-through medaka according to claim 25 wherein said organ is a gonadal organ.

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER LLP

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
www.finnegan.com

30. (Previously presented) The transgenic see-through medaka according to claim 26 wherein said organ is a gonadal organ.

31-50. (Cancelled)

FINNEGAN  
HENDERSON  
FARABOW  
GARRETT &  
DUNNER <sup>LLP</sup>

1300 I Street, NW  
Washington, DC 20005  
202.408.4000  
Fax 202.408.4400  
[www.finnegan.com](http://www.finnegan.com)